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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,722	02/27/2004	Yvette S. Atkinson	SAN-04	6798

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EXAMINER	
POLLICOFF, STEVEN B	

ART UNIT	PAPER NUMBER
3728	

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/788,722	ATKINSON ET AL.	
	Examiner	Art Unit	
	Steven B. Pollicoff	3728	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5-15,17 and 18* is/are rejected.

7)☐ Claim(s) *3,4,16,19 and 20* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. 6/13/06
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,8-10,12-14 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by DeHaven (US Pat 4,242,169).

With respect to claim 1, DeHaven discloses a tire storage system comprising a spacer (See DeHaven Fig. 1, reference numbers 30a&b) placed in the opening of a tire (10), the opening being a cavity to dispose a rim of the tire, the rim being absent from the opening, the tire having a bead of a predetermined circumference and a hollow inside. The spacer comprises a top portion (34) having a circumference greater than the predetermined circumference of the bead of the tire (Fig 2 at reference number 34; the bead being reference number 24), a cylindrical body having a center (see Fig. 1, generally at 30a&b), and a connecting rod (see Fig. 2 reference numbers 48 and 50) disposed through the center of the body. DeHaven discloses identical first and second tire caps (see Fig. 1, reference numbers 44 and 44') each comprising a head portion (46 and 46') and a base portion (the spoke arrangement of reference numbers 52 and 52' and outer annular surface area of 44 and 44'), where the head portion of the first tire cap fits through the opening (Fig 2 at reference number 46) and the base portion of the second tire cap is disposed atop the tire (at reference number 52'); wherein the spacer

and the head portion of the first tire cap substantially fill the opening of the tire (see reference numbers 46,30a&b).

As to Claim 2, DeHaven discloses that the connecting rod further comprises a first tip (Fig. 2, at left-most opening of reference number 48) and a second tip (right-most opening at reference number 50), wherein the first tip engages securely with the head portion of the first tire cap (see Fig. 2 where reference number 46 is threaded into hollow rod portion 48) and the second tip engages securely with the head portion of the second tire cap (see Fig. 2 where reference number 46 is threaded into hollow rod portion 50) when the first tire cap and second tire cap are affixed to the spacer (see Fig. 2 generally).

As to claims 8-10, while DeHaven does not explicitly disclose that the first tire cap is stackable atop a second tire storage system (i.e. retreading apparatus), the DeHaven device is certainly capable of having the first tire cap stacked atop a second tire retreading apparatus. The Dehaven device is also capable of having the second tire storage system stacked atop the second tire cap, having the first tire cap stacked atop the second tire cap prior to being engaged with the spacer, and the second tire cap stacked atop the first tire cap prior to being engaged with the spacer.

As to Claim 12, Dehaven discloses that the top portion of the spacer is disposed over the bead of the tire when the tire storage system is fully engaged (see DeHaven, Fig. 2, reference number 34 where it contacts reference number 24).

As to Claim 13, DeHaven discloses that the size of the spacer is tailored to the size of the opening of the tire (see DeHaven Figs. 1 and 2 generally).

As to Claim 14, Dehaven discloses that the tire retreading apparatus comprises a second spacer, wherein the second spacer is larger than the first spacer. Looking at Fig. 2 of DeHaven, the Examiner considers the first spacer to be the portion of the spacer (34) that extends through the tire wall openings (i.e. the spacer extension passing through the diameter of the tire bead). The Examiner considers the flange component of the spacer (34) that extends over the tire bead (24) to be the second spacer. As defined, the second spacer has a larger diameter than the first spacer. Therefore, the second spacer is larger than the first spacer.

As to Claim 17 inasmuch as Applicant's storage system prevents mosquitoes from breeding inside or atop the tire, the tire apparatus of DeHaven will inherently prevent mosquitoes from breeding inside or atop the tire as well because the spacer and tire caps effectively seal off the opening in the tire (DeHaven Fig 2 at connection between reference number 24 and 34).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 5,11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeHaven (US Pat 4,242,169) in view of Witherspoon (US Pat 4,309,234).

As to claims 5,11 and 18, DeHaven does not disclose that spacer and caps are made from an elastomeric compound and that the base portion of each tire cap has gently sloping flexible side wherein the sides slightly flatten when the tire is disposed atop the tire cap and seals the tire against the base portion. However, Witherspoon discloses a retreading apparatus with two rubber compound (i.e. elastomeric compound) tire cap bases having gently sloping flexible side wherein the sides slightly flatten when the tire is disposed atop the tire cap and seals the tire against the base portion (Witherspoon Fig 1 reference number 37 and 39; see also column 3 lines 33-35 and 55-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the spacer and base portions (at the outer annular surface area 44 and 44') of DeHaven to include gently sloping flexible sides that slightly flatten when the tire is disposed atop the tire cap so as to create a more effective seal between the tire and the tire cap.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeHaven (US Pat 4,242,169) in view of Witherspoon (US Pat 4,309,234) as applied to claim 5 above and further in view of Abu-Isa, (U.S. Pat. No. 6,809,129).

DeHaven, as modified above, does not disclose that the elastomeric compound includes a fire-retardant material. However, Abu-Isa discloses a useful fire-retardant

elastomeric compound for industrial applications (see Abu-Isa Column 5,Lines 25-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the material of the modified DeHaven tire caps and spacer to include a fire-retardant material for the purpose of preventing tire fires that can occur when, as Applicant discloses, tires spontaneously combust or at least for the purpose of delaying the spread of a fire to other tires or items stored in close proximity to one another until fire fighting remedies are available and employed.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeHaven (US Pat 4,242,169) in view of Witherspoon (US Pat 4,309,234) as applied to claim 5 above and further in view of Bethe et al., (U.S. Pat. No. 3,033,804).

DeHaven as modified above discloses all the limitations of the claim except for it does not disclose that the caps and spacer are treated with a fire-retardant material after formation. However, Bethe discloses that synthetic rubber-like polymers (an elastomeric compound) can be treated in a fire-retardant aqueous bath. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the modified DeHaven caps and spacer to be treated with a fire retardant after their formation, as taught by Bethe, since treating the caps and spacer with the fire retardant after formation may be more economical and efficient or more effective than producing the tire storage elements with the fire retardant already impregnated in the choice material.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeHaven (US Pat 4,242,169) as applied to claims 1,13 and 14 above and further in view of Ehrgott (U.S. Pat. No. 6,729,485).

DeHaven discloses all the limitations of the claim except for it does not disclose that the second spacer is a different color from the first spacer. However, Ehrgott discloses a storage device that is color coded for facilitating rapid assembly (see Ehrgott Column 8, Lines 4-15). Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the DeHaven spacer to be different colors, as taught by Ehrgott, for the purpose of ease of assembly, indicating compatibility between parts, and identification of individual parts (see Ehrgott Column 8, Lines 4-15).

Allowable Subject Matter

Claims 3,4,16,19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments, see Remarks section of Applicant's response pages 3-7, filed 4/17/06, with respect to the rejection(s) of claim(s) 1 under 35 USC 103, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration and based on the newly amended claims, a new ground(s) of rejection is made in view of a newly found prior art reference that anticipates the elements of amended claim 1.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. Pollicoff whose telephone number is (571)272-7818. The examiner can normally be reached on M-F: 7:30A.M.-4:00P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on (571)272-4562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SBP 6/26/06
SBP

JILA M. MOHANDESI
PRIMARY EXAMINER